

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN050119\  
 Data File : VN055319.D  
 Acq On : 1 May 2019 10:55  
 Operator : JC/SP  
 Sample : VN0501WBL01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0501WBL01

Quant Time: May 02 01:47:56 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N042919W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 30 07:16:52 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 346373   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 584866   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 554151   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 146562   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 237501   | 52.41 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.82% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 197011   | 51.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.64% |          |
| 50) Toluene-d8              | 10.09 | 98   | 747524   | 53.93 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.86% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 229341   | 52.94 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.88% |          |

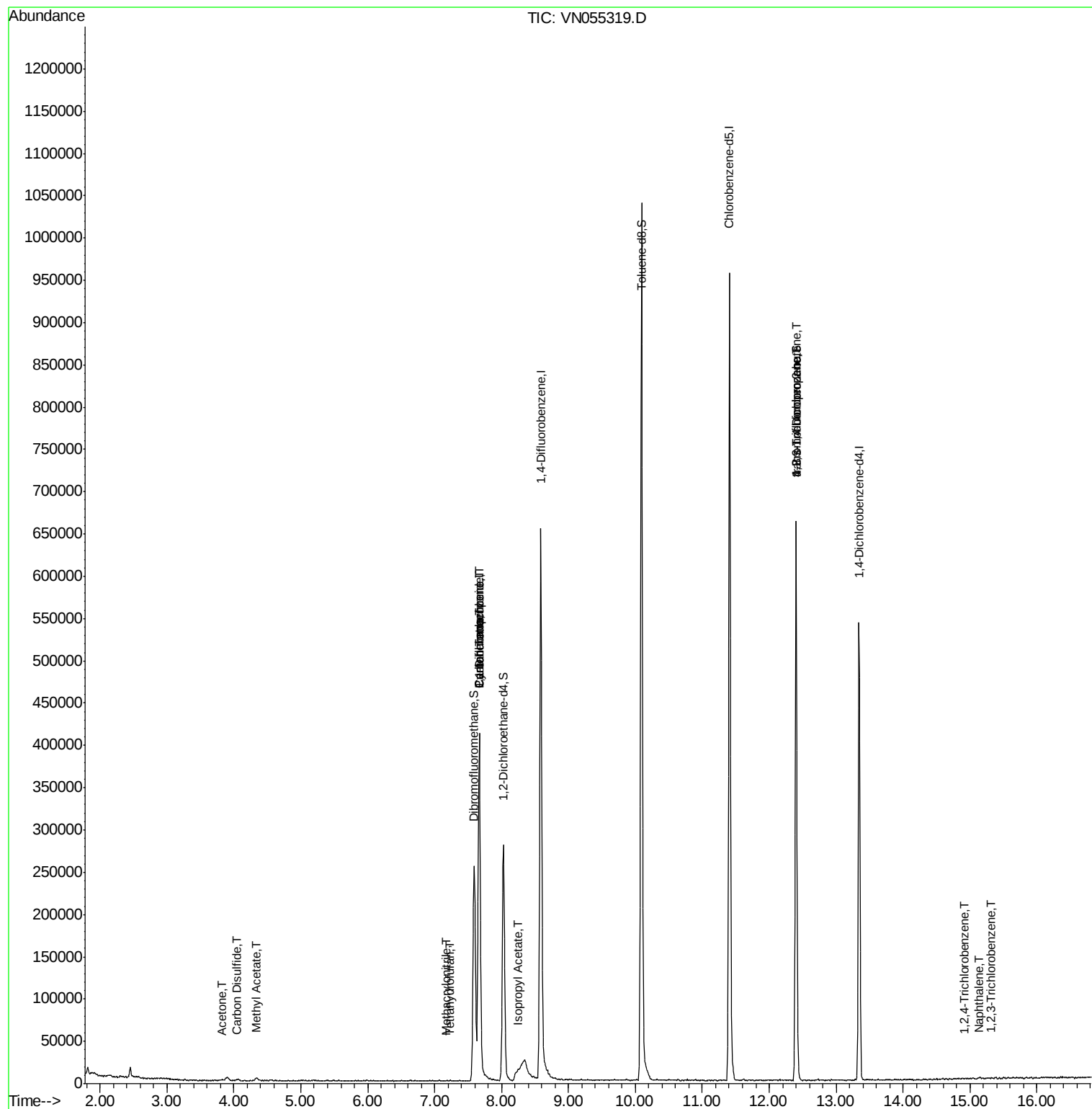
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 16) Acetone                    | 3.81  | 43   | 1162     | 0.823     | ug/l # | 45     |
| 17) Carbon Disulfide           | 4.05  | 76   | 2647     | 0.296     | ug/l # | 74     |
| 18) Methyl Acetate             | 4.34  | 43   | 6342     | 0.825     | ug/l   | 100    |
| 29) Tetrahydrofuran            | 7.21  | 42   | 278      | 0.240     | ug/l # | 40     |
| 31) Cyclohexane                | 7.66  | 56   | 7724     | 1.084     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 26460    | 4.723     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 7.66  | 117  | 34596    | 6.402     | ug/l # | 16     |
| 41) Methacrylonitrile          | 7.17  | 41   | 136      | 0.798     | ug/l # | 4      |
| 43) Isopropyl Acetate          | 8.23  | 43   | 9201     | 1.333     | ug/l # | 56     |
| 73) Isopropylbenzene           | 12.25 | 105  | 150      | Below Cal | #      | 49     |
| 75) 1,1,2,2-Tetrachloroethane  | 12.42 | 83   | 115      | Below Cal | #      | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 116863   | 42.521    | ug/l # | 100    |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 105      | Below Cal | #      | 42     |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 116863   | 151.106   | ug/l # | 7      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 137      | Below Cal | #      | 25     |
| 93) 1,2,4-Trichlorobenzene     | 14.92 | 180  | 132      | 3.375     | ug/l # | 30     |
| 95) Naphthalene                | 15.14 | 128  | 530      | 3.450     | ug/l # | 69     |
| 96) 1,2,3-Trichlorobenzene     | 15.32 | 180  | 246      | 2.736     | ug/l # | 78     |

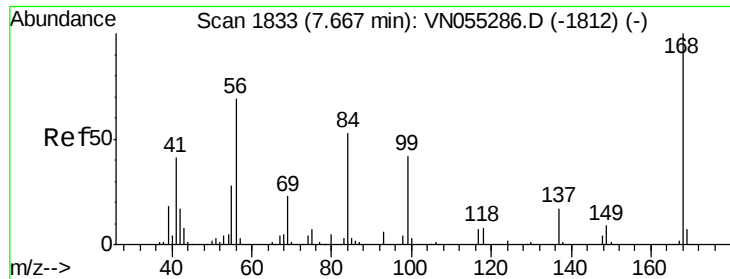
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN050119\  
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MSVOA\_N  
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VN0501WBL01

Quant Time: May 02 01:47:56 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N042919W.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 30 07:16:52 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

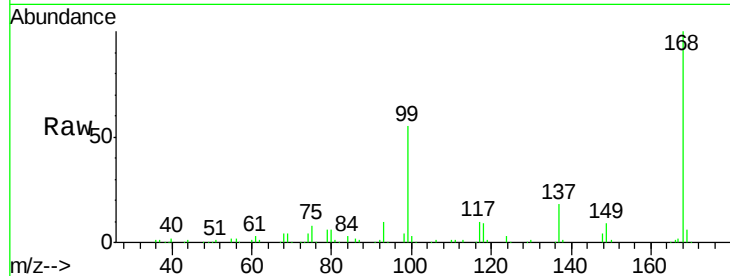
VN0501WBL01

Tot Ion:168 Resp: 346373

Ion Ratio Lower Upper

168 100

99 54.5 43.6 65.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.67

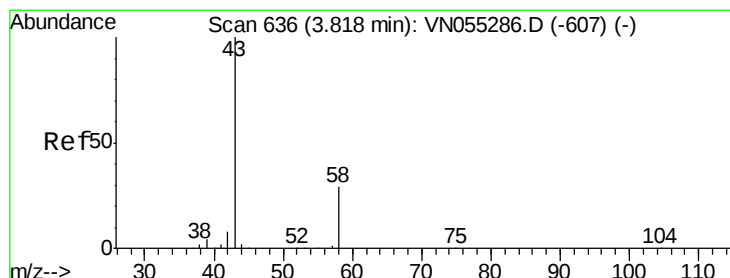
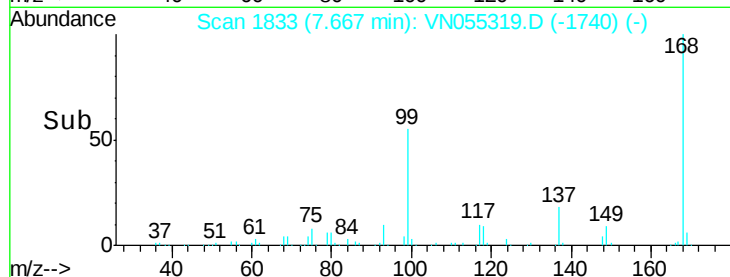
150000

100000

50000

0

Time-->



#16

Acetone

Concen: 0.823 ug/l

RT: 3.81 min Scan# 634

Delta R.T. -0.01 min

Lab File: VN055319.D

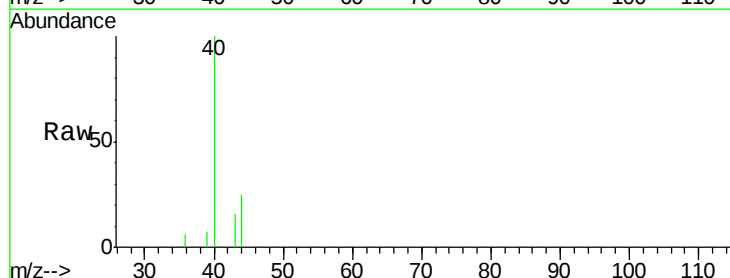
Acq: 1 May 2019 10:55

Tgt Ion: 43 Resp: 1162

Ion Ratio Lower Upper

43 100

58 0.0 23.6 35.4#



Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 58.00 (57.70 to 58.70): VNO

3.81

500

400

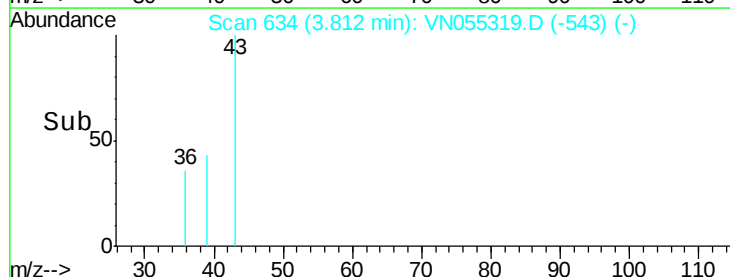
300

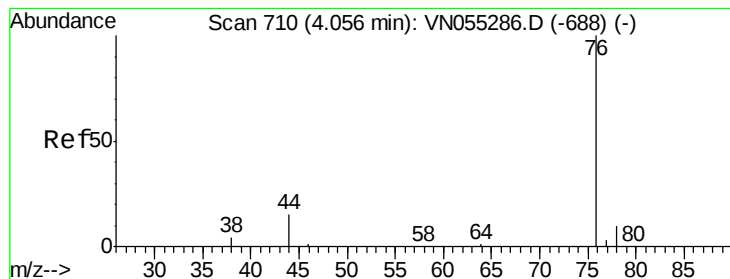
200

100

0

Time-->





#17

Carbon Disulfide

Concen: 0.296 ug/l

RT: 4.05 min Scan# 708

Delta R.T. -0.01 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

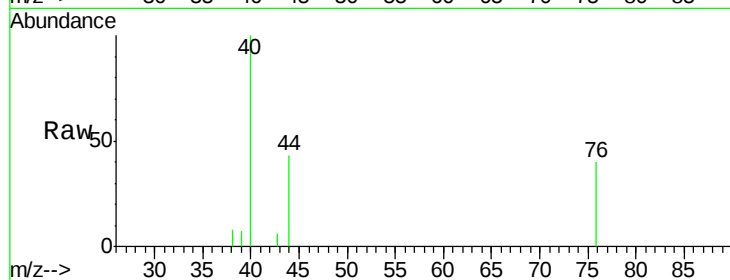
VN0501WBL01

Tot Ion: 76 Resp: 2647

Ion Ratio Lower Upper

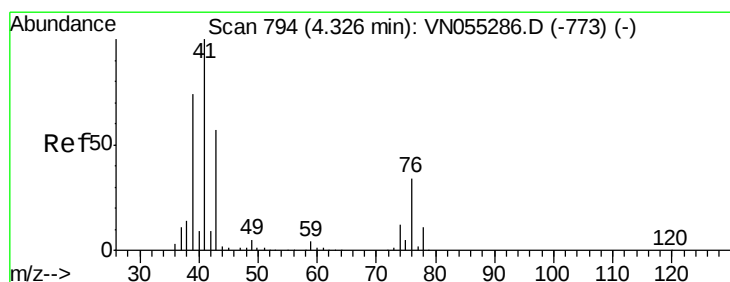
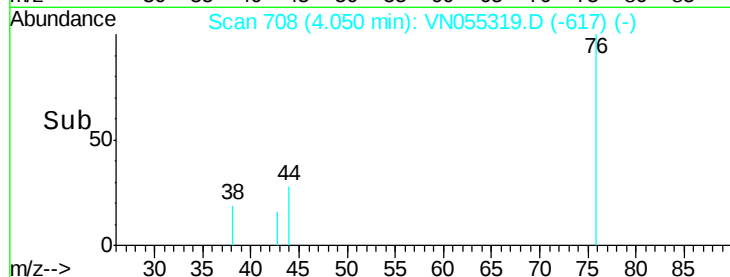
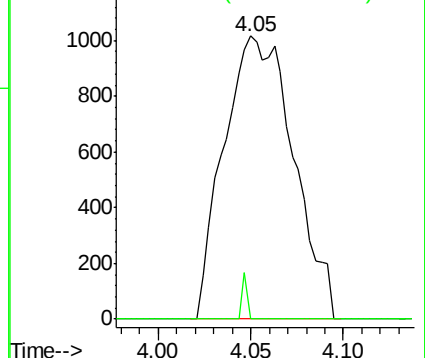
76 100

78 0.0 7.6 11.4#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#18

Methyl Acetate

Concen: 0.825 ug/l

RT: 4.34 min Scan# 799

Delta R.T. 0.02 min

Lab File: VN055319.D

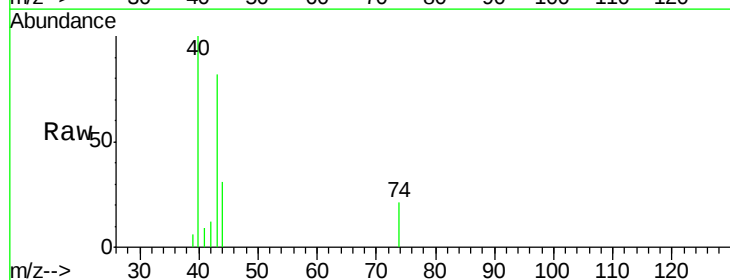
Acq: 1 May 2019 10:55

Tgt Ion: 43 Resp: 6342

Ion Ratio Lower Upper

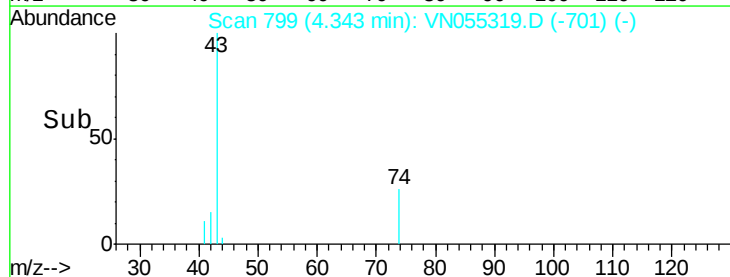
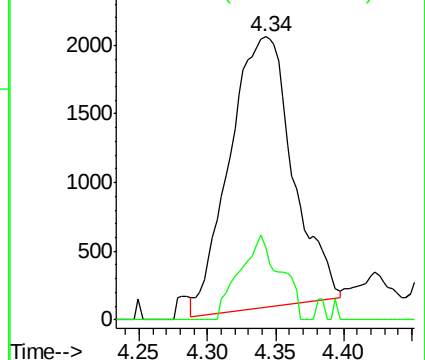
43 100

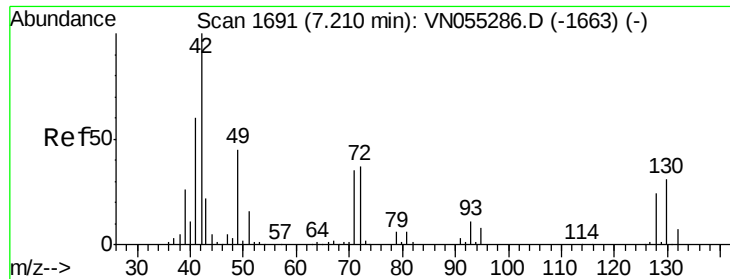
74 20.0 15.8 23.8



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

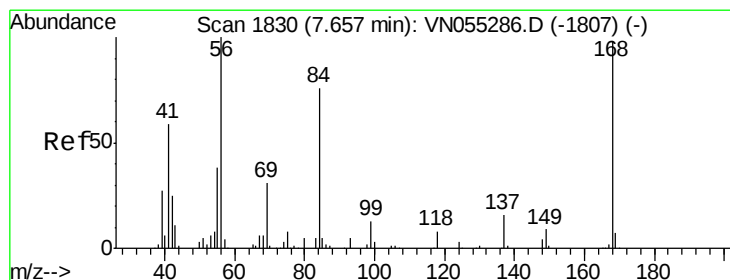
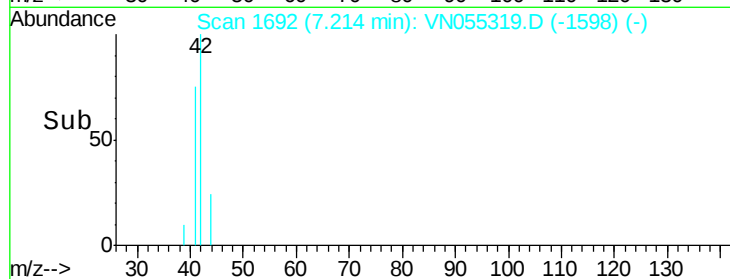
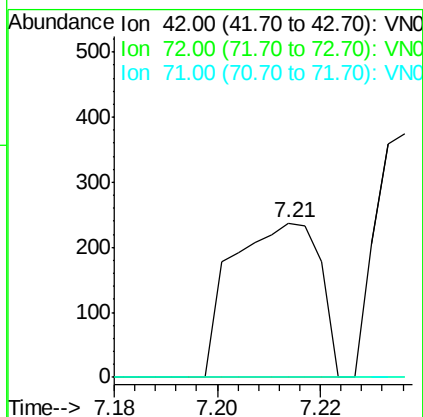
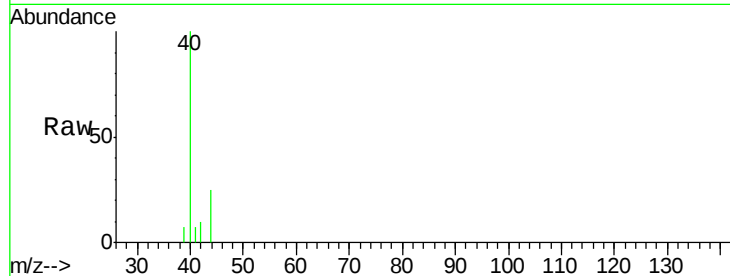




#29  
Tetrahydrofuran  
Concen: 0.240 ug/l  
RT: 7.21 min Scan# 1692  
Delta R.T. 0.00 min  
Lab File: VN055319.D  
Acq: 1 May 2019 10:55

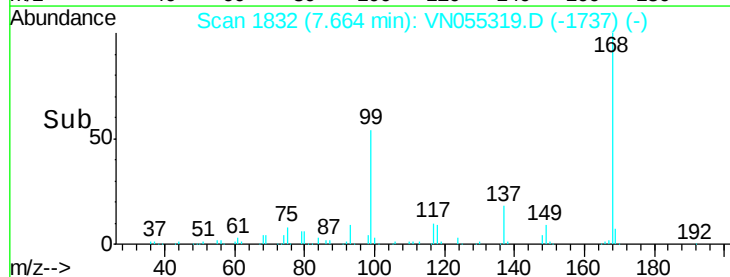
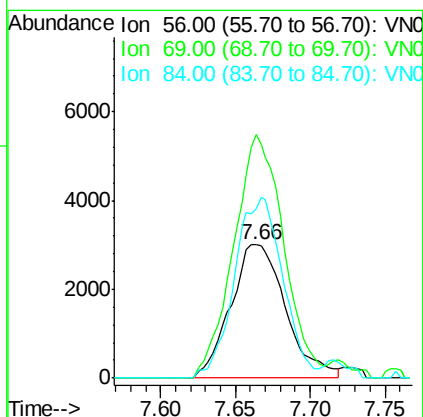
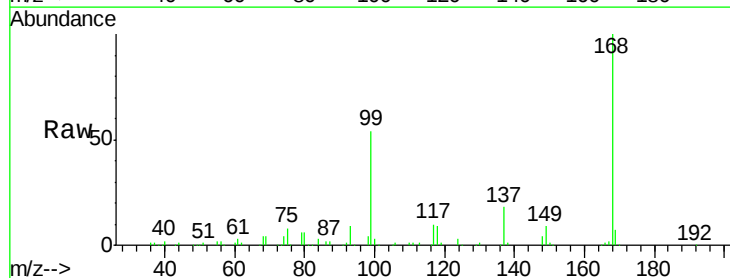
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0501WBL01

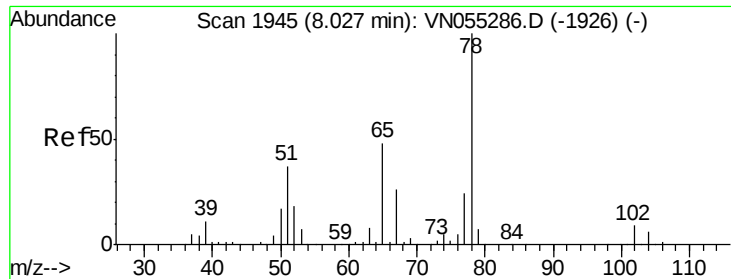
Tot Ion: 42 Resp: 278  
Ion Ratio Lower Upper  
42 100  
72 0.0 29.0 43.6#  
71 0.0 27.1 40.7#



#31  
Cyclohexane  
Concen: 1.084 ug/l  
RT: 7.66 min Scan# 1832  
Delta R.T. 0.01 min  
Lab File: VN055319.D  
Acq: 1 May 2019 10:55

Tgt Ion: 56 Resp: 7724  
Ion Ratio Lower Upper  
56 100  
69 182.5 25.2 37.8#  
84 126.5 61.1 91.7#





#33

1,2-Dichloroethane-d4

Concen: 52.413 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. 0.00 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

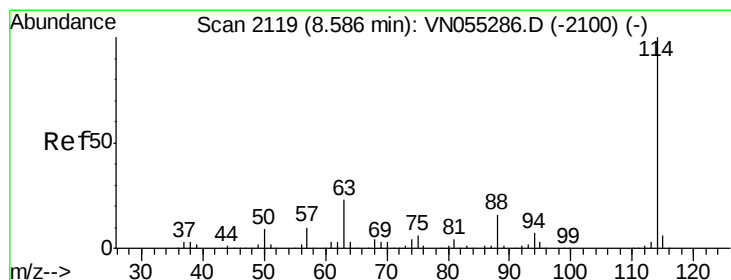
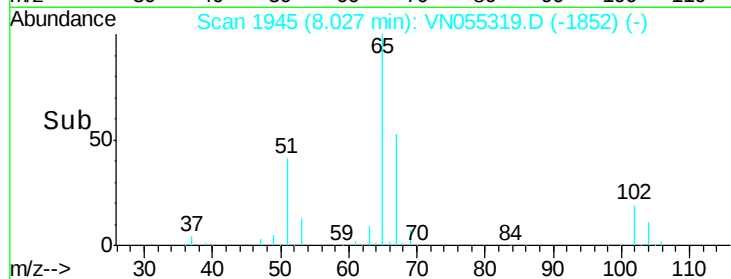
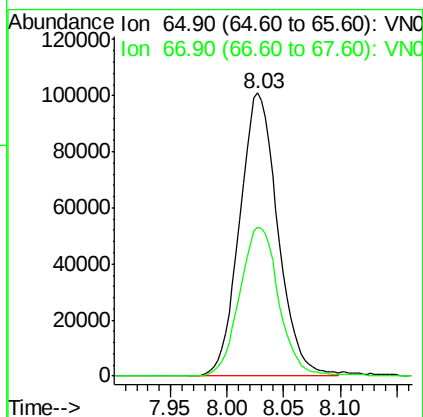
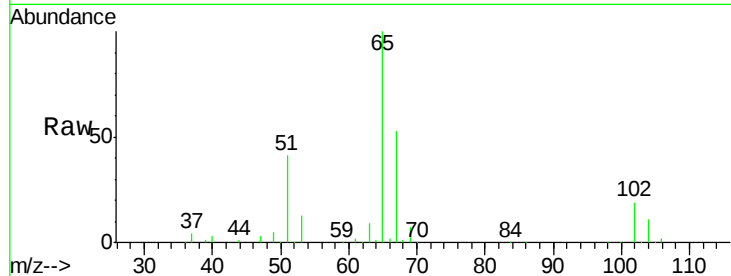
VN0501WBL01

Tot Ion: 65 Resp: 237501

Ion Ratio Lower Upper

65 100

67 54.1 0.0 106.8



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. 0.00 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

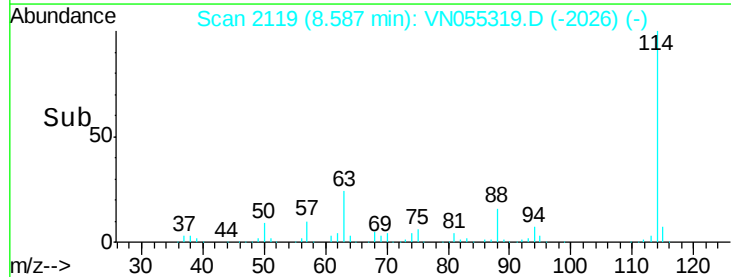
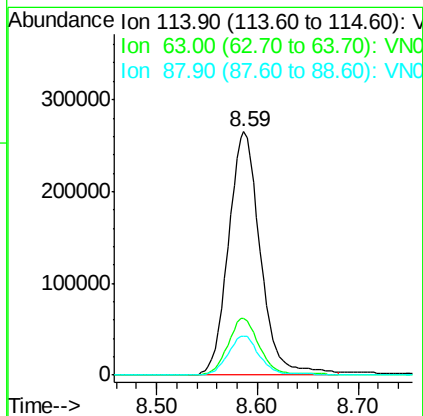
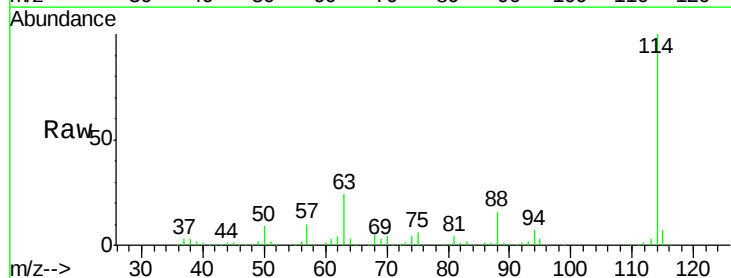
Tgt Ion: 114 Resp: 584866

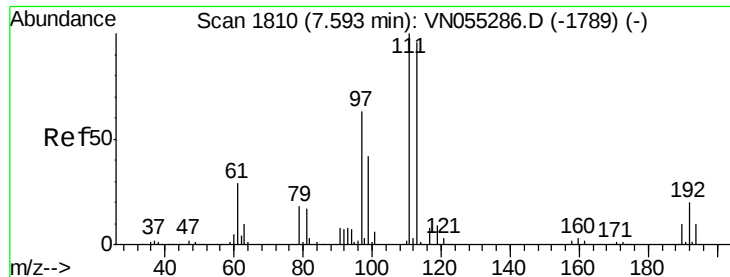
Ion Ratio Lower Upper

114 100

63 23.5 0.0 45.2

88 16.2 0.0 31.6

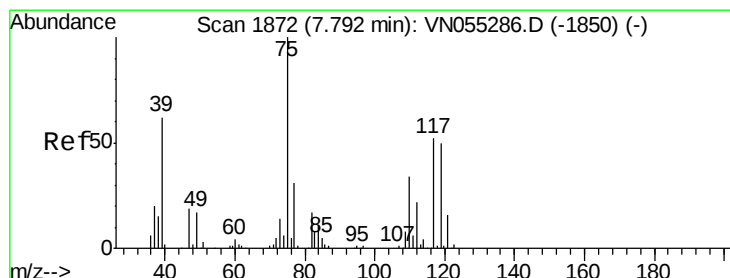
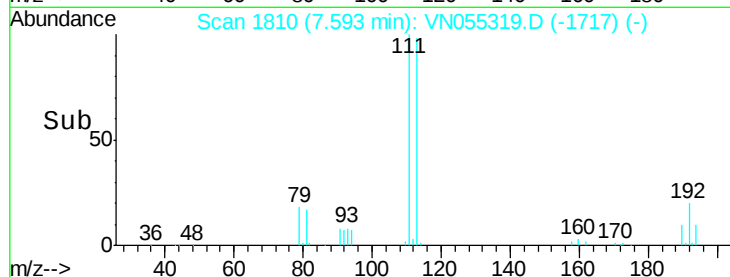
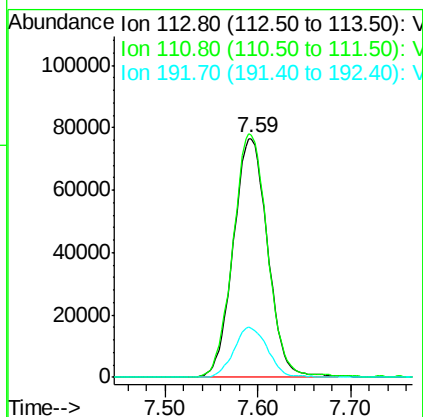
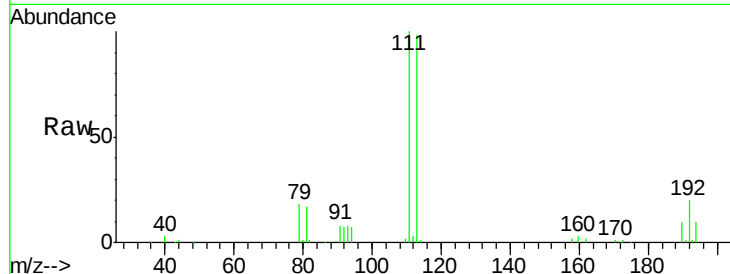




#35  
 Dibromofluoromethane  
 Concen: 51.320 ug/l  
 RT: 7.59 min Scan# 1810  
 Delta R.T. 0.00 min  
 Lab File: VN055319.D  
 Acq: 1 May 2019 10:55

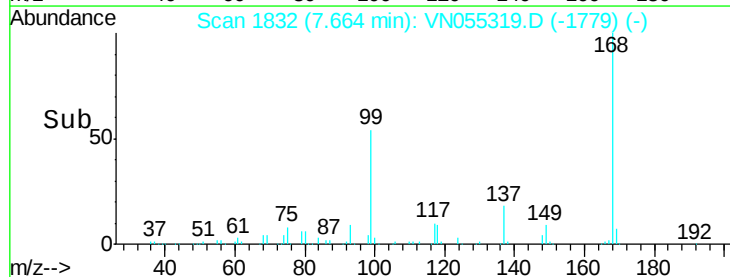
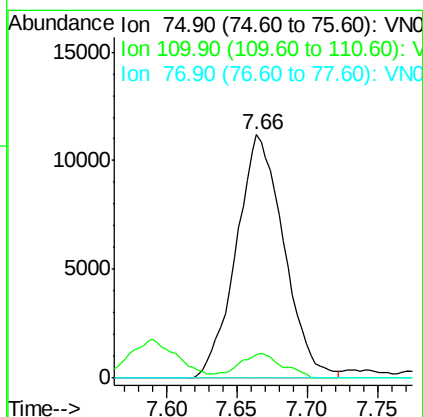
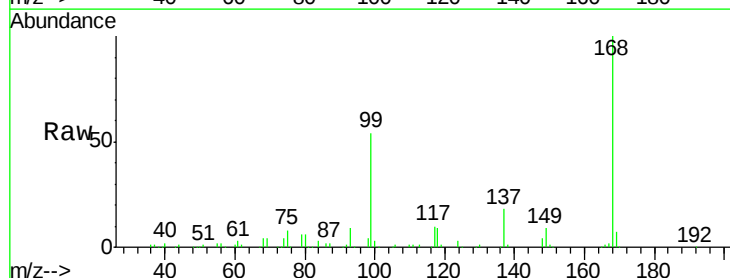
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 VN0501WBL01

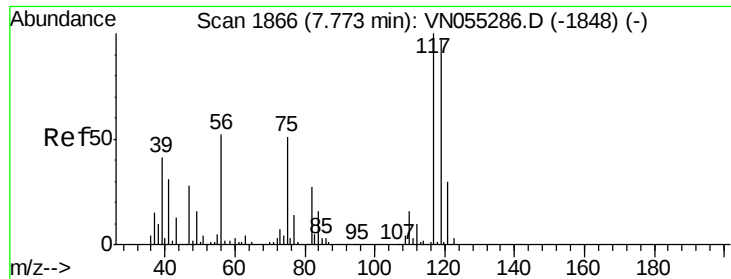
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.9 | 82.3  | 123.5 |
| 192     | 20.6  | 17.0  | 25.6  |



#36  
 1,1-Dichloropropene  
 Concen: 4.723 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.13 min  
 Lab File: VN055319.D  
 Acq: 1 May 2019 10:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.3   | 16.8  | 50.4# |
| 77      | 0.0   | 25.0  | 37.6# |





#38

Carbon Tetrachloride

Concen: 6.402 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.11 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

VN0501WBL01

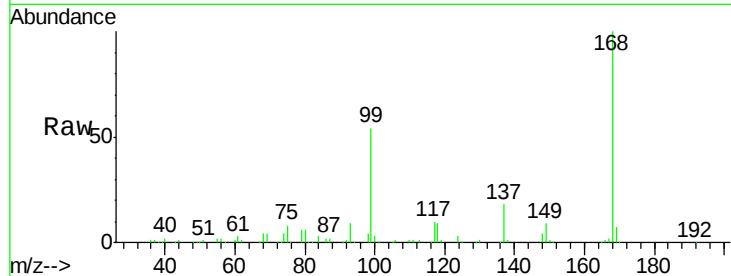
Tot Ion:117 Resp: 34596

Ion Ratio Lower Upper

117 100

119 5.5 77.0 115.6#

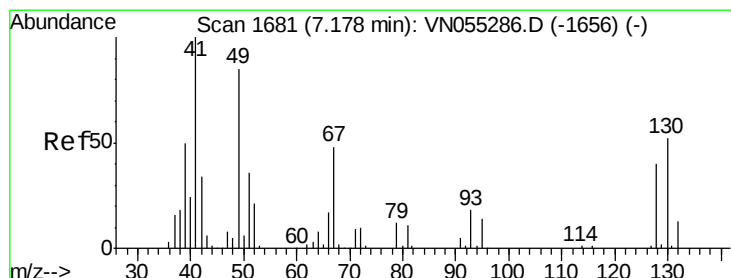
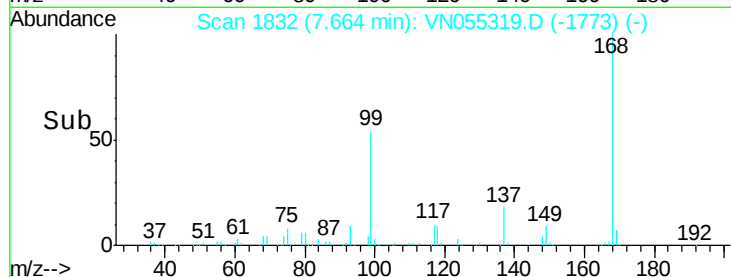
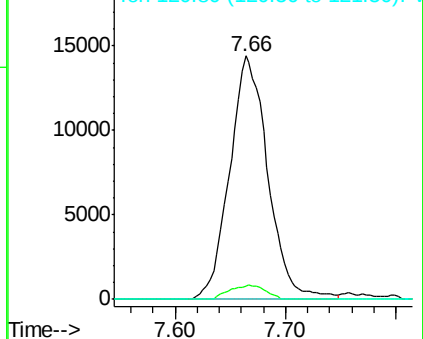
121 0.0 23.8 35.8#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#41

Methacrylonitrile

Concen: 0.798 ug/l

RT: 7.17 min Scan# 1679

Delta R.T. -0.01 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Tgt Ion: 41 Resp: 136

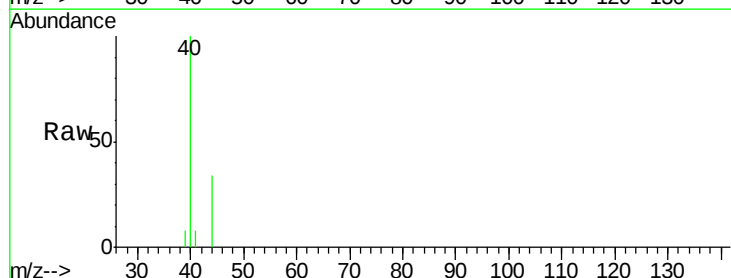
Ion Ratio Lower Upper

41 100

39 158.8 48.5 72.7#

67 0.0 54.9 82.3#

52 0.0 24.9 37.3#

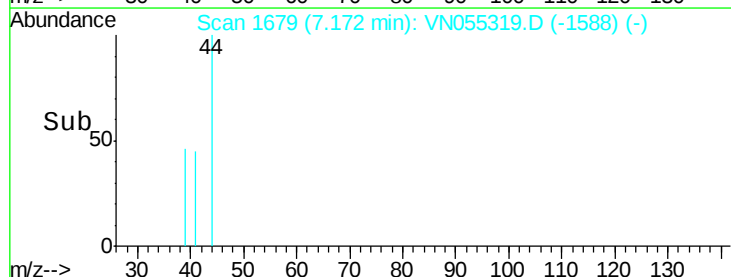
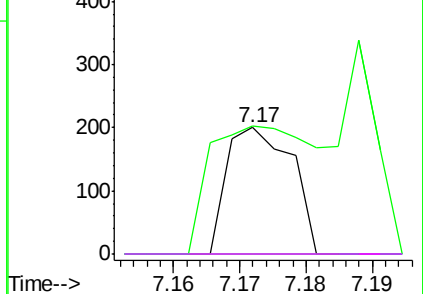


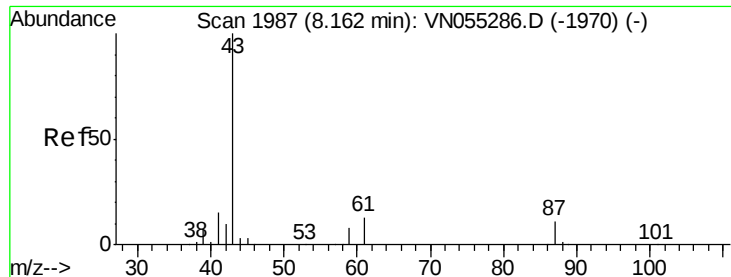
Abundance Ion 41.00 (40.70 to 41.70): V

Ion 39.00 (38.70 to 39.70): V

Ion 67.00 (66.70 to 67.70): V

Ion 52.00 (51.70 to 52.70): V





#43

Isopropyl Acetate

Concen: 1.333 ug/l

RT: 8.23 min Scan# 2008

Delta R.T. 0.07 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

VN0501WBL01

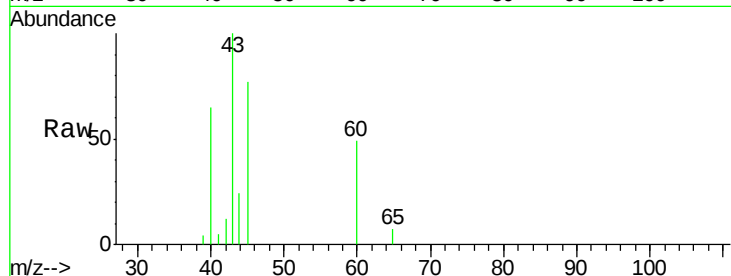
Tot Ion: 43 Resp: 9201

Ion Ratio Lower Upper

43 100

61 0.0 20.8 31.2#

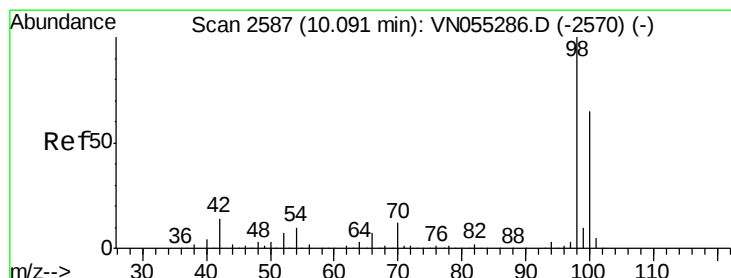
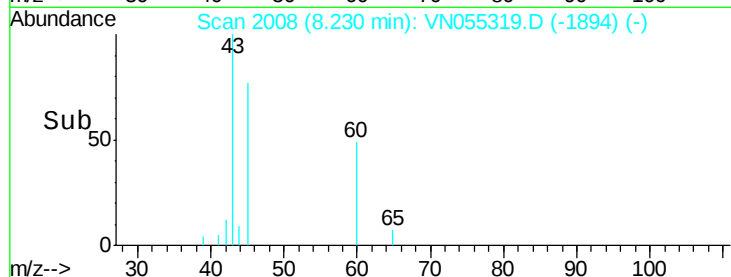
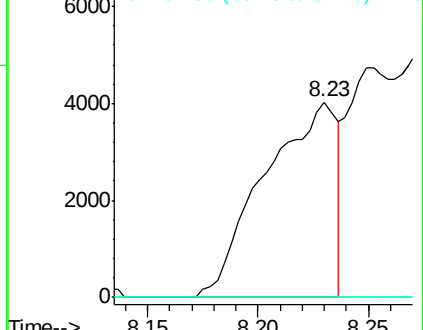
87 0.0 8.5 12.7#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 87.00 (86.70 to 87.70): VN0



#50

Toluene-d8

Concen: 53.927 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN055319.D

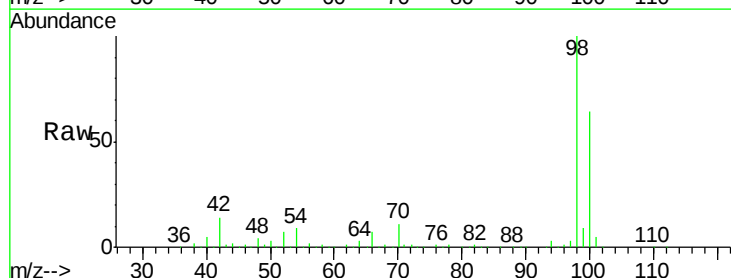
Acq: 1 May 2019 10:55

Tgt Ion: 98 Resp: 747524

Ion Ratio Lower Upper

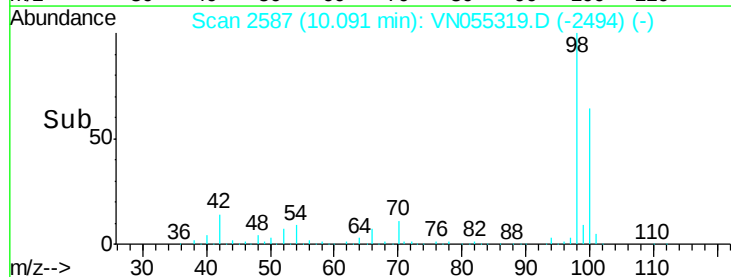
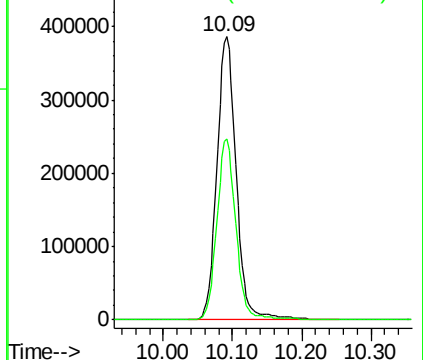
98 100

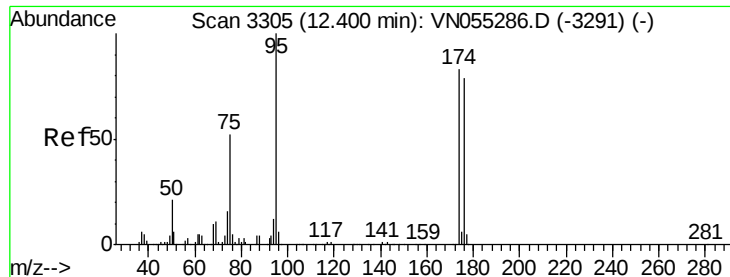
100 63.2 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0





#62

4-Bromofluorobenzene

Concen: 52.938 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

VN0501WBL01

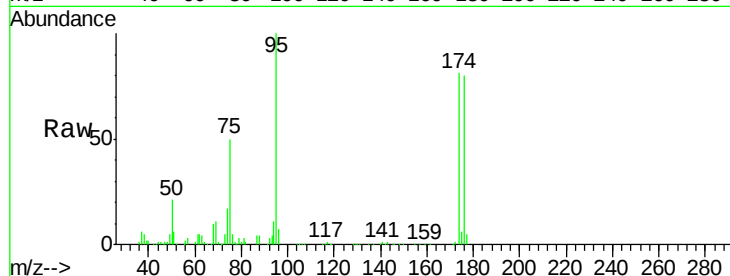
Tot Ion: 95 Resp: 229341

Ion Ratio Lower Upper

95 100

174 83.1 0.0 166.6

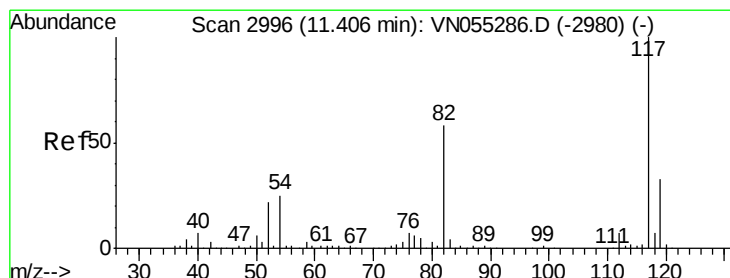
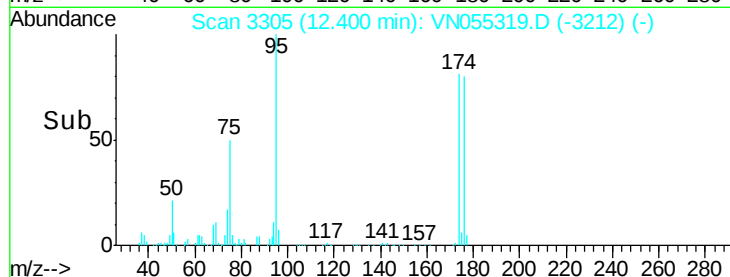
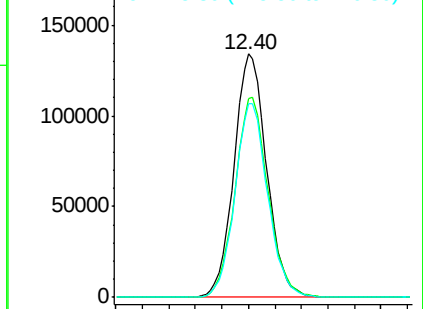
176 79.6 0.0 157.8



Abundance Ion 94.90 (94.60 to 95.60): VN055286.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN055286.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN055286.D (-3291) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

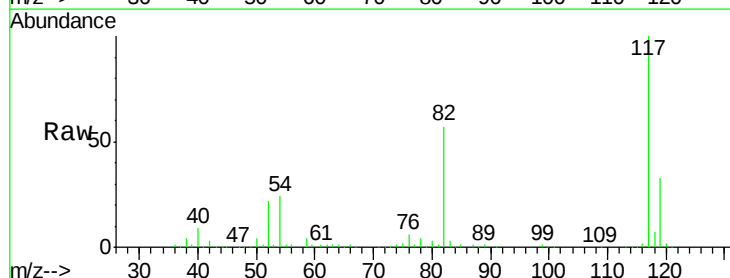
Tgt Ion: 117 Resp: 554151

Ion Ratio Lower Upper

117 100

82 57.0 46.2 69.4

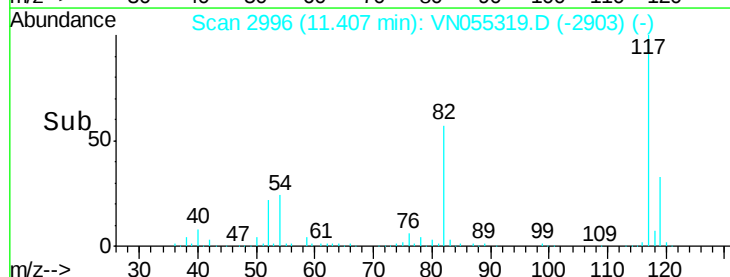
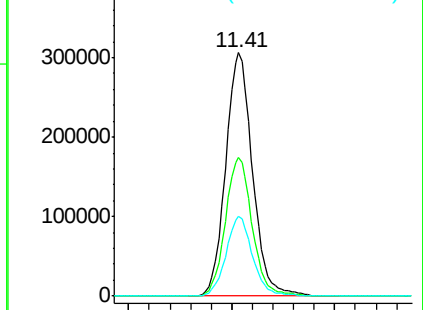
119 32.8 26.6 40.0

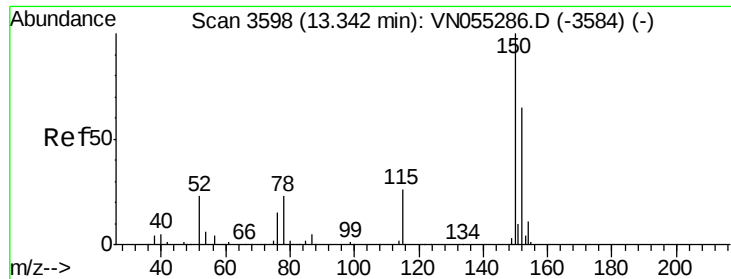


Abundance Ion 116.90 (116.60 to 117.60): VN055286.D (-2980) (-)

Ion 82.00 (81.70 to 82.70): VN055286.D (-2980) (-)

Ion 118.90 (118.60 to 119.60): VN055286.D (-2980) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. 0.00 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

VN0501WBL01

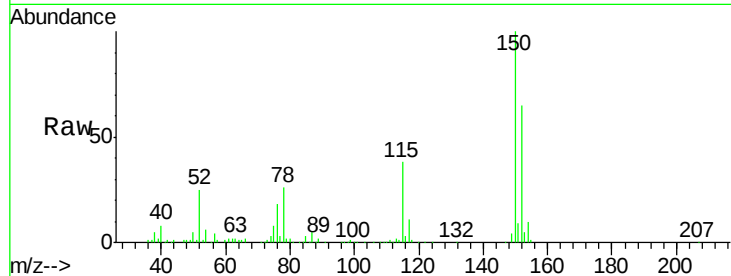
Tot Ion:152 Resp: 146562

Ion Ratio Lower Upper

152 100

115 58.9 29.0 87.0

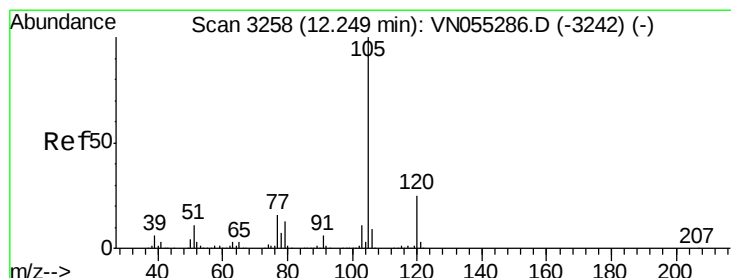
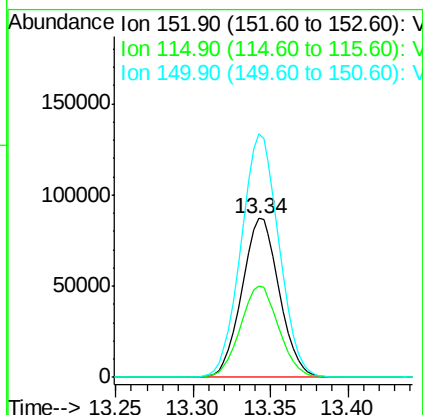
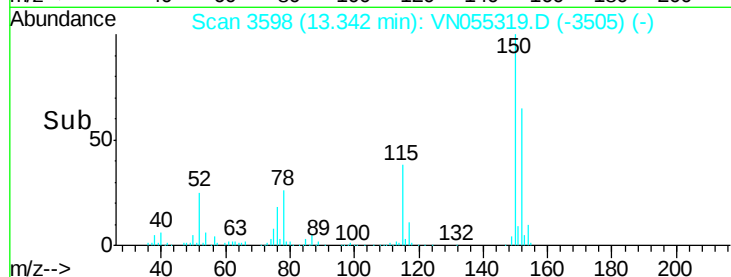
150 155.7 0.0 345.6



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#73

Isopropylbenzene

Concen: Below Cal

RT: 12.25 min Scan# 3257

Delta R.T. -0.00 min

Lab File: VN055319.D

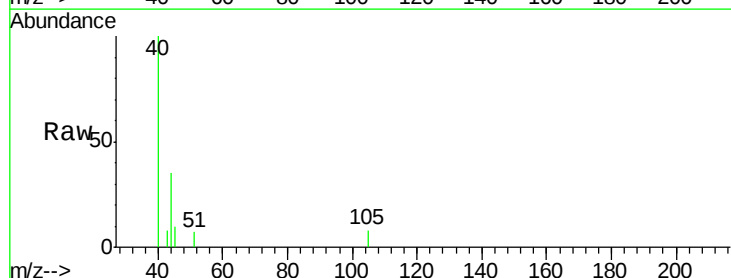
Acq: 1 May 2019 10:55

Tgt Ion:105 Resp: 150

Ion Ratio Lower Upper

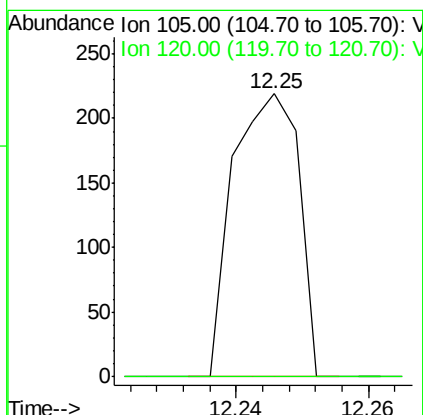
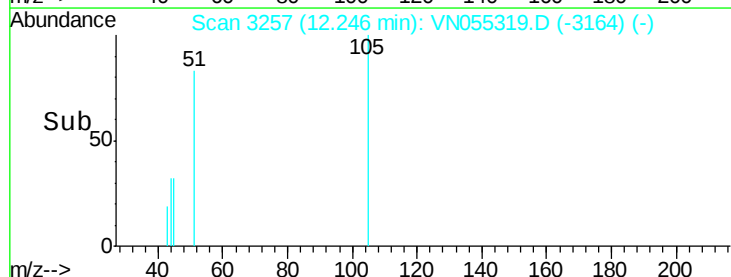
105 100

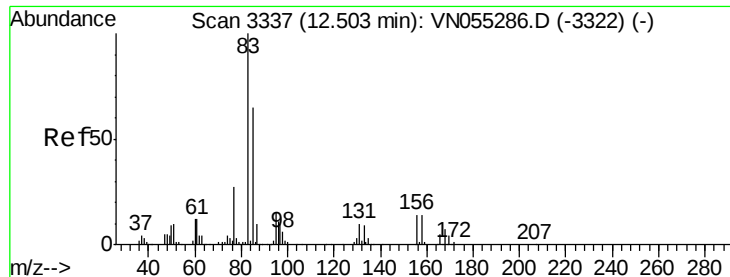
120 0.0 12.9 38.7#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.42 min Scan# 3311

Delta R.T. -0.08 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

VN0501WBL01

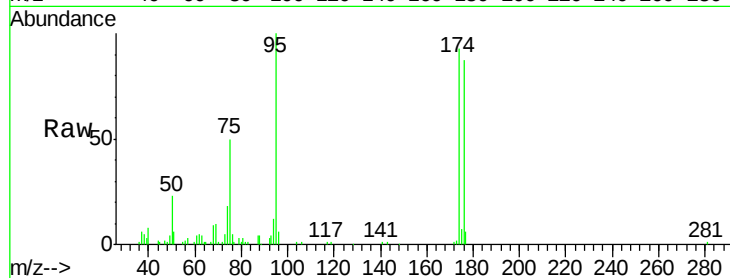
Tot Ion: 83 Resp: 115

Ion Ratio Lower Upper

83 100

131 151.3 5.1 15.2#

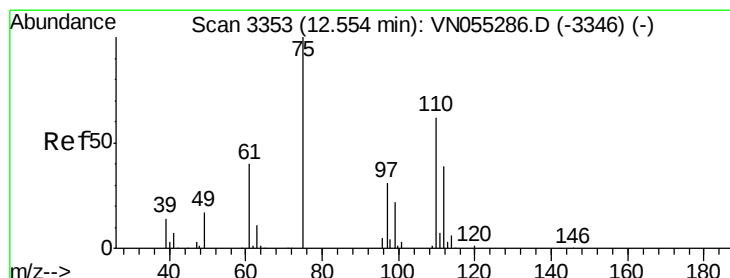
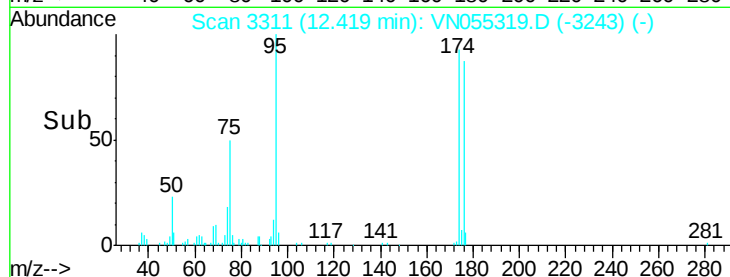
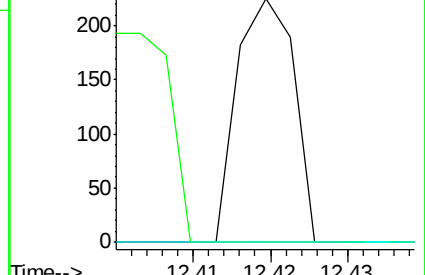
85 0.0 32.3 96.8#



Abundance Ion 82.90 (82.60 to 83.60): VN0

Ion 130.80 (130.50 to 131.50): VN0

Ion 84.90 (84.60 to 85.60): VN0



#76

1,2,3-Trichloropropane

Concen: 42.521 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN055319.D

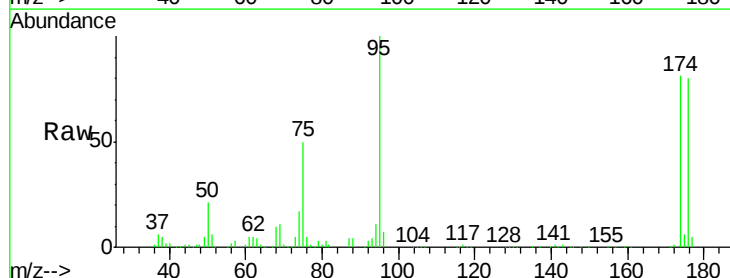
Acq: 1 May 2019 10:55

Tgt Ion: 75 Resp: 116863

Ion Ratio Lower Upper

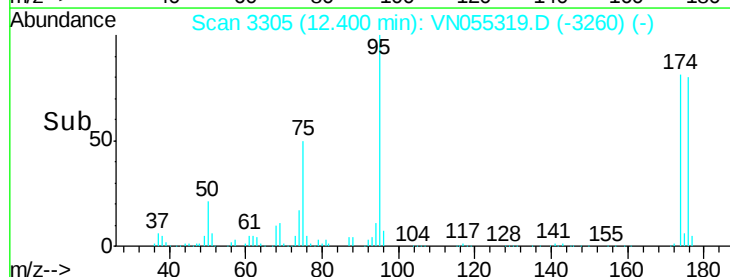
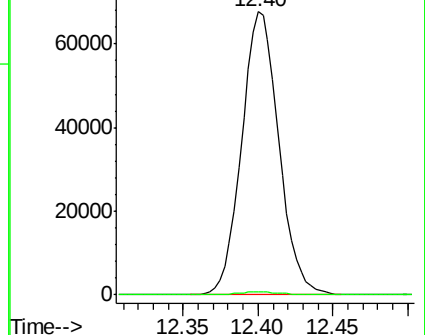
75 100

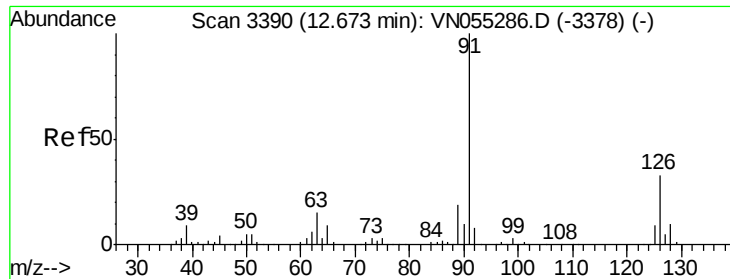
77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0





#79

2-Chlorotoluene

Concen: Below Cal

RT: 12.68 min Scan# 3391

Delta R.T. 0.00 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

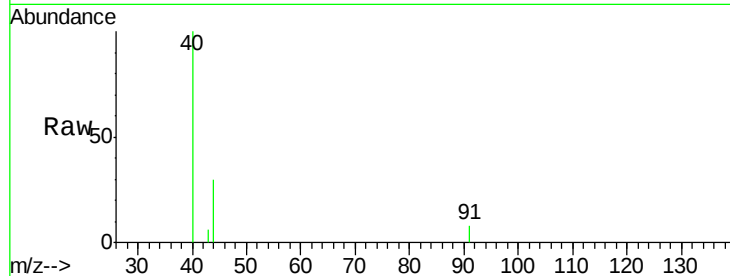
VN0501WBL01

Tot Ion: 91 Resp: 105

Ion Ratio Lower Upper

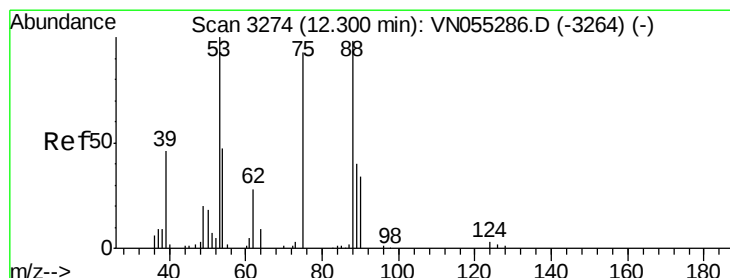
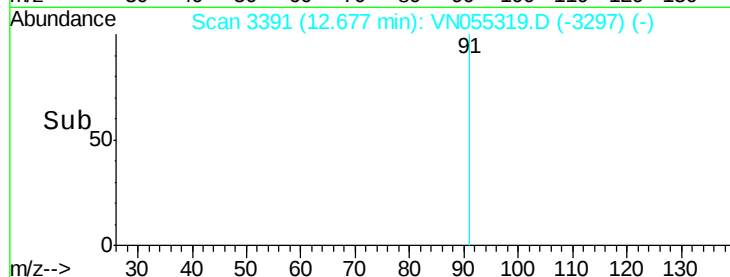
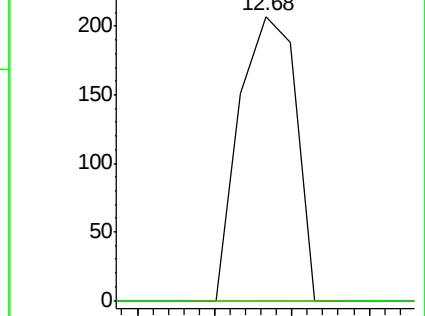
91 100

126 0.0 16.6 49.7#



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 125.90 (125.60 to 126.60): V



#81

trans-1,4-Dichloro-2-butene

Concen: 151.106 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

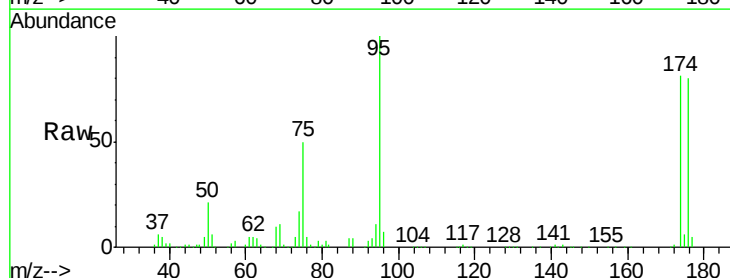
Tgt Ion: 75 Resp: 116863

Ion Ratio Lower Upper

75 100

53 0.0 86.3 129.5#

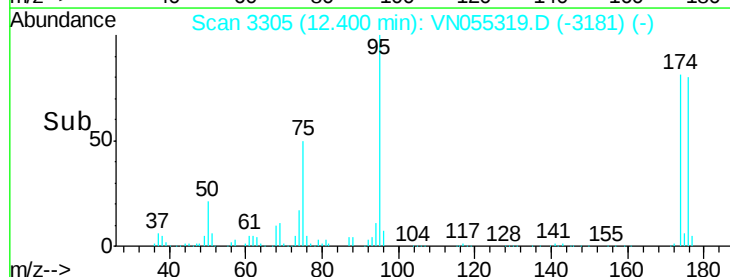
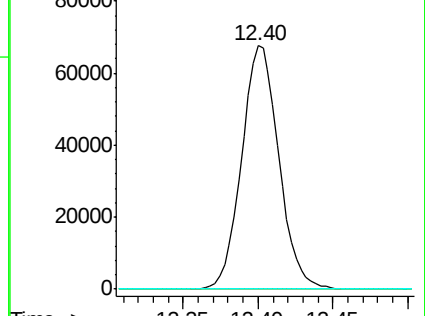
89 0.1 34.6 51.8#

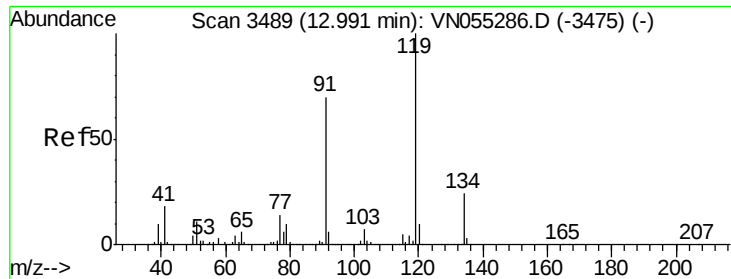


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

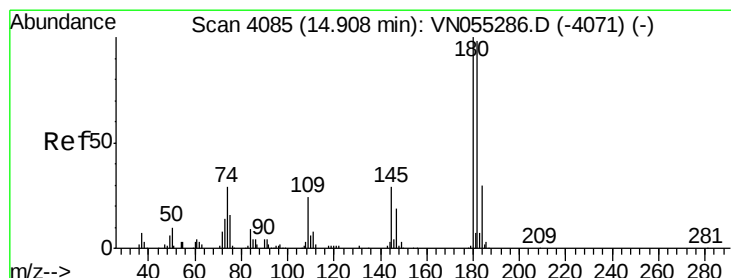
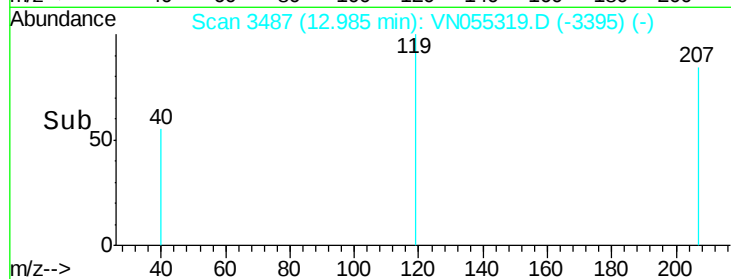
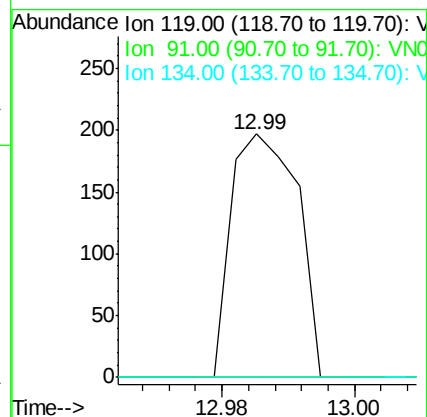
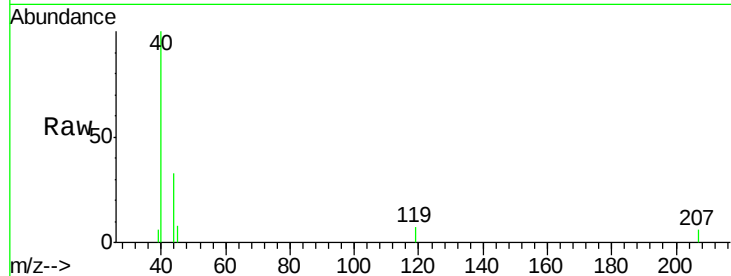




#83  
 tert-Butylbenzene  
 Concen: Below Cal  
 RT: 12.99 min Scan# 3487  
 Delta R.T. -0.01 min  
 Lab File: VN055319.D  
 Acq: 1 May 2019 10:55

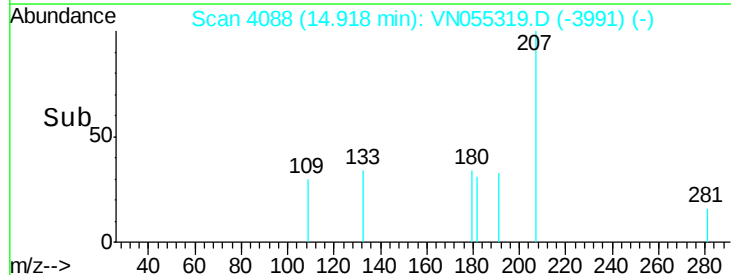
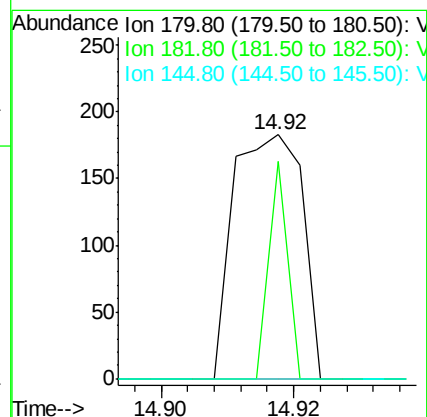
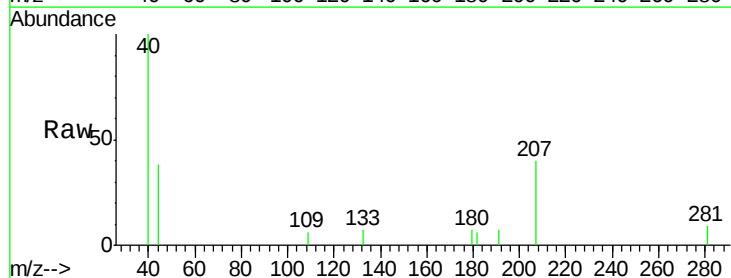
Instrument :  
 MSVOA\_N  
 ClientSampled :  
 VN0501WBL01

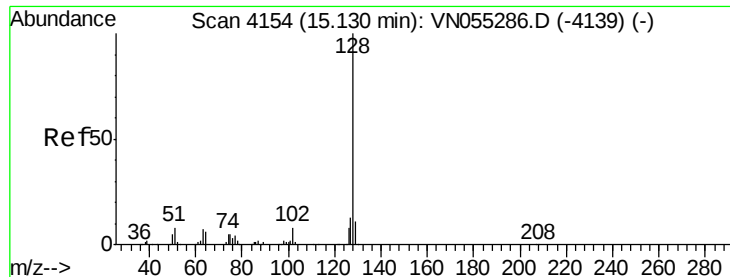
| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 119     | 100   |       |        |
| 91      | 0.0   | 34.3  | 102.9# |
| 134     | 0.0   | 13.1  | 39.3#  |



#93  
 1,2,4-Trichlorobenzene  
 Concen: 3.375 ug/l  
 RT: 14.92 min Scan# 4088  
 Delta R.T. 0.01 min  
 Lab File: VN055319.D  
 Acq: 1 May 2019 10:55

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 180     | 100   |       |        |
| 182     | 23.5  | 48.3  | 144.9# |
| 145     | 0.0   | 14.2  | 42.6#  |





#95

Naphthalene

Concen: 3.450 ug/l

RT: 15.14 min Scan# 4158

Delta R.T. 0.01 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

Instrument :

MSVOA\_N

ClientSampleId :

VN0501WBL01

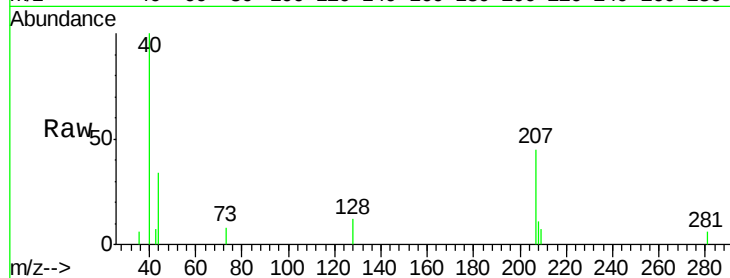
Tot Ion:128 Resp: 530

Ion Ratio Lower Upper

128 100

127 0.0 10.7 16.1#

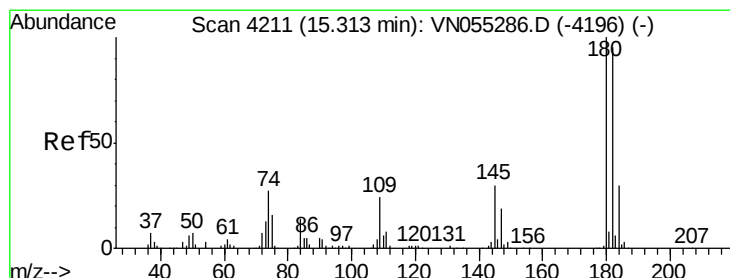
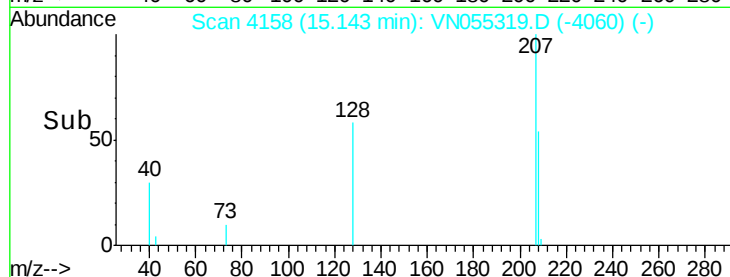
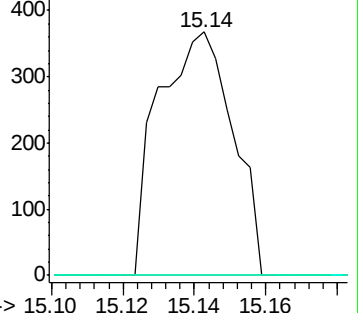
129 0.0 8.6 13.0#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#96

1,2,3-Trichlorobenzene

Concen: 2.736 ug/l

RT: 15.32 min Scan# 4212

Delta R.T. 0.00 min

Lab File: VN055319.D

Acq: 1 May 2019 10:55

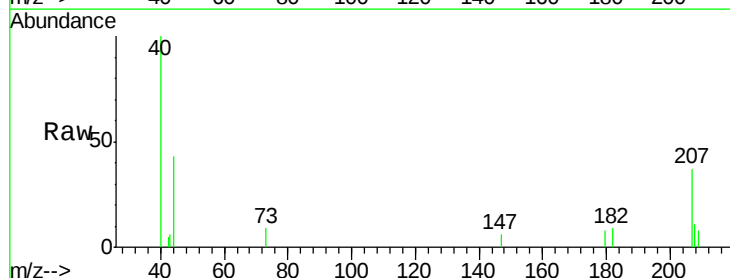
Tgt Ion:180 Resp: 246

Ion Ratio Lower Upper

180 100

182 107.3 48.3 144.9

145 0.0 15.2 45.6#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

